



Australian Government

Defence

**RAAF BASE LEARMONTH
REDEVELOPMENT
ENABLING KC-30A OPERATIONS**

Exmouth, Western Australia

**STATEMENT OF EVIDENCE
TO THE
PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS**

November 2023

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RAAF Base Learmonth Redevelopment

Enabling KC-30A Operations

1. The purpose of this Statement of Evidence is to provide information to the Australian public to comment on, and the Parliamentary Standing Committee on Public Works to enquire into, proposed works under RAAF Base Learmonth Redevelopment Enabling KC-30A Operations (the Project).

Executive Summary

2. The aim of the Project is to upgrade the airfield at RAAF Base Learmonth to meet Defence requirements for the support of KC-30A operations and to improve overall airfield resilience. RAAF Base Learmonth is part of the network of northern airbases that the Government has directed are an immediate priority for upgrade in response to the Defence Strategic Review.

3. The KC-30A aircraft provides strategic airlift and air-to-air refuelling for the Australian Defence Force (ADF). The KC-30A's maximum payload for operations out of RAAF Base Learmonth is currently constrained due to the extant airfield infrastructure. This constraint reduces the aircraft's range, endurance and the fuel that can be off-loaded to receiver aircraft when conducting air-to-air refuelling operations.

4. The Project proposes to strengthen the runway and parallel taxiway, construct new connecting taxiways, and construct dedicated parking aprons for KC-30A and other large aircraft to support the loading and unloading of cargo and explosive ordnance. Aprons will incorporate high-volume in-ground hydrant refuelling points connected to a new six million litre aviation fuel installation.

5. The estimated total capital out-turned cost of the Project is \$662.2 million (excluding Goods and Services Tax). The cost estimate includes management and design fees, construction costs and provisions for escalation, risk and contingencies. There will be ongoing increased operating costs as a result of the Project. No revenue is expected to be generated by these proposed works.

6. Defence will promote opportunities for small and medium local enterprises through construction trade packages and provide employment opportunities in the Exmouth region. There will also be opportunities for Indigenous businesses to be involved in the Project in accordance with the Government's Indigenous Procurement Policy.

7. All works will be designed and constructed in accordance with relevant legislation, standards, codes, guidelines and Defence policy. Accredited building certifiers and pavement engineers will certify the compliance of the design and completed works. Environmental and heritage investigations have been completed and the Project will not have significant impact on existing environmental and heritage values.

Purpose of the Works

Aim of the Project

8. The aim of the Project is to upgrade the airfield at RAAF Base Learmonth to meet Defence's requirements to support KC-30A operations and to improve overall airfield resilience.

Location of the Project

9. The Project will be delivered at RAAF Base Learmonth, located approximately 37 kilometres south of Exmouth, Western Australia.

Need for the Project

10. The 2023 Defence Strategic Review encompasses a revised strategy of deterrence through denial that requires the ADF to have the capability to hold an adversary force at risk in our northern maritime approaches. This strategy needs to be supported by a network of fully enabled northern bases that provide a platform for operations and logistics support. The need to upgrade critical northern bases was identified as a priority in the Defence Strategic Review.

11. Logistics resupply of materiel by air to RAAF Base Learmonth is critical given its remote location, strategic capabilities at the nearby Harold E Holt Defence Establishment and the vulnerabilities of alternative modes of resupply. The ability of the ADF to project force in Australia's northern maritime approaches is enhanced by air-to-air refuelling which extends the endurance of supported aircraft. These receiving aircraft provide critical air capabilities, including surveillance and reconnaissance, intelligence collection, anti-submarine warfare, defensive counter-air and maritime strike.

12. The KC-30A is the largest aircraft in the ADF fleet and provides strategic airlift and air-to-air refuelling. The KC-30A is a modified Airbus A330 which is classified as a Code E aircraft. The proposed upgrades to RAAF Base Learmonth will increase base resilience and the airfield's operational utility as the key node for air logistics and air-to-air refuelling operations in Australia's north-west.

Proposed Facilities Solution

13. Defence undertook comprehensive master planning, site investigations, stakeholder consultation, whole-of-life cost analysis and design development to establish the capital facilities and infrastructure works required to address the Project need.

14. The Project will provide:

- a. strengthened and widened runway and taxiways;
- b. connecting taxiways to new dedicated aircraft parking aprons that support the loading and unloading of cargo and explosive ordnance;
- c. high-volume in-ground hydrant refuelling points on aprons; and
- d. enhancements to other airbase infrastructure to improve resilience.

Options Considered

15. Defence has developed the following four options to meet the Project need:

- a. **Option 1 – Do nothing.** This option would not undertake any upgrade works. Due to the age of the existing aircraft pavements, Defence would be required to undertake a comprehensive program of resurfacing works on all aircraft pavements, but without any improvement to the current operational constraints.
- b. **Option 2 – In-Budget.** This option includes turning nodes for large wide-bodied aircraft at each end of the runway, a single bay parking apron for Code E aircraft with an in-ground hydrant refuelling point, taxiway widening and strengthening to access to the new apron. This option would support KC-30A and other large aircraft transiting through RAAF Base Learmonth, however operational constraints would remain due to runway strength and limited apron space.
- c. **Option 3 – Minimum Viable Capability.** This option includes strengthening of the runway, widening and strengthening of the parallel taxiway to support larger aircraft, an additional two-bay aircraft parking apron with in-ground hydrant refuelling points, and improved flood resilience. The upgrade to the parallel taxiway will enable its used as an alternate runway for military and civil aircraft up to the size of Boeing 737 (Code 4C) aircraft. This option will enable RAAF Base Learmonth to serve as the key node for air logistics and air-to-air refuelling operations within Australia's north-west region.

- d. **Option 4 – Enhanced Resilience.** This option will retain the proposed construction workers' camp to function as additional transit accommodation at an area located away from existing operational areas to enhance resilience.
- 16. **Preferred option.** Option 3 is the preferred option as it meets essential capability requirements and aligns with immediate actions directed by the Government in response to the Defence Strategic Review.

Scope of Project Works for the Preferred Option

- 17. The recommended Option 3 includes the following work elements:
 - a. strengthening and widening of Runway 18/36 to support KC-30A operations;
 - b. strengthening and widening of the parallel taxiway to support KC-30A and to function as an alternate runway for Code 4C aircraft;
 - c. construction of new, and strengthening and widening of existing taxiways across the airfield to provide connection to new aircraft parking aprons;
 - d. construction of new aircraft parking aprons with in-ground hydrant refuelling points, and to support loading and unloading of cargo and explosive ordnance;
 - e. refurbishment of airfield lighting and new aircraft apron flood lighting;
 - f. relocation and compliance works across the airfield to increase flood resilience, including raising of the levee bank; and
 - g. upgrades and extension to critical services and infrastructure, including potable water, fire water, sewer, power and roads.

Planning and Design Concepts

- 18. The general philosophy for the design of the proposed works is based on:
 - a. providing cost-effective, functional, low maintenance, energy efficient design options compatible with proposed functions and existing aesthetics;
 - b. adopting (where possible) conventional construction techniques and materials commonly used by the construction industry and consistent with those already used;
 - c. applying appropriate durability measures to reduce ongoing maintenance and achieve the proposed design life; and

- d. providing flexible engineering services and infrastructure to accommodate an appropriate level of growth.

Relevant Legislation, Codes and Standards

19. The following legislation, standards, codes and guidelines are applicable:
 - a. *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*;
 - b. *Fair Work (Building Industry) Act 2012 (Cth)*;
 - c. *Work Health and Safety Act 2011 (Cth)*;
 - d. *Disability Discrimination Act 1992 (Cth)*;
 - e. *Fair Work Act 2009 (Cth)*;
 - f. Defence Aviation Safety Authority Regulations (DASR 139 – Aerodromes);
 - g. Civil Aviation Safety Authority Regulations including Manual of Standards 139;
 - h. National Construction Code - Building Code of Australia;
 - i. Defence Manual for Infrastructure Engineering Electrical;
 - j. Defence Smart Infrastructure Manual; and
 - k. Defence Manual of Fire Protection Engineering.

Land and Zoning

20. The proposed works are consistent with uses prescribed in relevant Defence zoning instruments, including the RAAF Base Learmonth Flight Line Master Plan and the Defence Estate Principles of Development.

Airfield Planning

21. The airfield elements have been designed according to the Defence Aviation Safety Authority's Aerodrome Regulations and Civil Aviation Safety Authority Manual of Standards. The proposed airfield elements will meet specific user needs, civil aviation user requirements and align with potential future changes to the airfield. The location and sizing of airfield elements is cognisant of the strategic requirements for RAAF Base Learmonth, ensuring abortive works will not be undertaken.

Leased Properties

22. The Shire of Exmouth operates a terminal on the eastern side of the runway that supports commercial passenger transport and general aviation. The proposed works will not

impact the associated property lease, but the runway works will impact civil aircraft operations. Defence has held preliminary discussions with the Shire, the airport operator and Qantas, and does not anticipate that the works will disrupt scheduled services.

Electrical Services

23. Lighting, power and lightning protection will be provided in accordance with Australian Standards and Defence engineering requirements. Electrical infrastructure and switchboards will have spare capacity to allow for future growth. Sub-metering will be included to each re-used and new building. The meters will be monitored through a new Building Management System, which will support an active energy management program on the site.

Security Measures

24. The security arrangements are a suite of measures based on the Defence-in-Depth principles. Security measures are compliant with statutory requirements and address all requirements identified by the Protective Security Working Group. The security design of the site will ensure that any new or temporary facilities conform to the existing security system employed by the base.

Work Health and Safety

25. The Project will comply with the *Work Health and Safety (WHS) Act 2011 (Cth)*, Work Health and Safety (Commonwealth Employment – National Standards) Regulations, and relevant Defence policies. In accordance with Section 35 (4) of the *Building and Construction Industry (Improving Productivity) Act 2016 (Cth)*, contractors will also be required to hold full work health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Work Health and Safety Accreditation Scheme.

26. Safety aspects of the Project have been addressed during the design development process and have been documented in a safety in design report. A work health safety plan will be developed for the construction phase prior to the commencement of any construction activities.

Provisions for People with Disabilities

27. Access for people with disabilities will be provided to facilities constructed under the Project in accordance with Defence Policy and the National Construction Code, Australia Standard 1428 and the *Disability and Discrimination Act 1992 (Cth)*.

Environmental Sustainability

28. Defence is committed to ecologically sustainable development and reducing greenhouse gas emissions. The Project has adopted cost effective measures as a key objective in the design and development of the proposed works. These include:

- a. Measures to reduce energy and water use:
 - (1) LED fittings (replacing halogen fittings) for airfield lighting;
 - (2) passive design to reduce energy usage for the acoustic shelter, insulated roof and wall system, shading to external walls and windows by roof overhang of the buildings; and
 - (3) use of natural ventilation for the High Voltage switch room / transformer, if feasible.
- b. Re-use of existing structures:
 - (1) the existing Airport Lighting Equipment Room will be retained.
- c. Re-use of waste products:
 - (1) reclaimed asphalt pavement will be re-used in new pavement layers or as high quality fill material in earthworks.
- d. Demolition and disposal of existing structures:
 - (1) The extent of existing structures to be demolished at RAAF Base Learmonth is very limited, with only an existing acoustic shelter being demolished and requiring disposal. The shelter is not suitable to be retained and relocated to the new site.

Potential Impacts

29. Defence has conducted rigorous assessments to identify potential environmental and local community impacts, and propose suitable mitigation measures. These include:

- a. **Heritage Impacts:**
 - (1) There are four identified Aboriginal heritage sites located in close proximity to RAAF Base Learmonth. The works to build new aircraft parking aprons and taxiways may disturb undocumented Aboriginal and historic heritage values. It may not be possible to alter the works while meeting capability requirements which may necessitate the relocation of artefacts with the cooperation of Traditional Owners. The Base holds historic heritage values

associated with the Learmonth Cemetery, Operation Potshot and various Air Force squadrons and historical leaders. The proposed works are not expected to adversely affect these historic values.

b. **Fauna Impacts:**

- (1) The works may have a hydrological impact on the Cape Range subterranean waterways due to water abstraction during construction. The Cape Range subterranean waterways may support populations of subterranean fauna that have significant conservation value. Hydrological impact surveys and underground habitat surveys are being progressed, but the initial assessment is that the risk is low as the Project will not exceed current water extraction limits and habitats are primarily in the lower aquifer levels and the bores draw water from elevated aquifer levels.

c. **Socio-economic impacts:**

- (1) The proposed works will require temporary closures of the runway at RAAF Base Learmonth. The airport is critical to the local economy; an inability for civilian traffic to operate from the airport during peak tourism seasons would impact the local community. The proposed works will be staged to minimise disruption to scheduled services. The Project is anticipated to require a peak Fly-In-Fly-Out (FIFO) workforce of around 300 persons. The FIFO workforce will be accommodated in a temporary camp on the base to minimise any adverse impact upon the community, given the limited availability of short-stay accommodation in Exmouth.

30. Based on the findings of assessments undertaken by the Project, Defence has determined that existing environmental and heritage values will not be significantly impacted by the Project. Therefore, the Project is not required to be referred to the Minister for the Environment and Water under the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*.

Contamination

31. Minor occurrence of per-and polyfluoroalkyl substances have been identified during the site investigations. These occurrences are within limits which allow the reuse of this material on Base in locations which do not make the receiving environment worse.

Consultation with Key Stakeholders

32. Defence has developed a community consultation and communications strategy for the Project that recognises the importance of providing local residents and other interested stakeholders an opportunity to provide input into, or raise concerns relating to, the proposed works. Defence has, and continues to, engage with a variety of internal and external stakeholders during the development of the Project to date. These include:

- a. The Member for Durack – The Honourable Melissa Price MP;
- b. The Shire of Exmouth Chief Executive Officer – Mr Ben Lewis;
- c. The Representative for North West Central – Ms Merome Beard MLA;
- d. The Nganhurra Thanardi Garrbu Aboriginal Corporation as the Traditional Owners for the lands occupied by RAAF Base Learmonth;
- e. The Exmouth Chamber of Commerce representing Local Businesses;
- f. QANTAS which operates daily services to and from RAAF Base Learmonth for the Exmouth community; and
- g. The Royal Flying Doctor Service which relies on RAAF Base Learmonth to operate medical evacuation and emergency response.

Related Projects

33. The following projects relate to the Project:

- a. **National Airfield Maintenance Works Project.** This airfield maintenance project will deliver maintenance works to all aircraft pavement areas that are not being upgraded by the Project. A Notification for Repetitive Works for this project was submitted to the PWC in November 2023.
- b. **Defence Fuels Transformation Program – Tranche 2.** This project will deliver a new fuel installation comprising 6 ML of aviation fuel storage and associated facilities and infrastructure. The in-ground refuelling hydrant points on the aircraft parking apron will be connected to the new fuel installation. A PWC briefing and public hearing for this project was held on 2 November 2023.
- c. **Cocos (Keeling) Islands Airfield Upgrade –Tranche 1.** This project will upgrade the Cocos (Keeling) Islands airfield to support military aircraft operations. Either the Cocos (Keeling) Islands airfield or the RAAF Base Learmonth airfield

must be available at all times to support military aircraft operations. PWC expediency for this project was received on 29 March 2023.

- d. **Estate Works Project – Electrical works.** The purpose of this project is to address defects identified in the RAAF Base Learmonth Electrical Infrastructure Master Plan.

34. Additional works at RAAF Base Learmonth are anticipated in response to the Defence Strategic Review. Projects to deliver these works have not yet progressed through Departmental committees or Government approval.

Cost Effectiveness and Public Value

Project Costs

35. The estimated total capital out-turned cost of the Project is \$662.2 million (excluding Goods and Services Tax). This cost estimate includes project management and design fees, construction, information and communications technology, furniture, fittings, equipment, contingencies and a provision for escalation.

36. There will be an increase in ongoing operating and sustainment costs of \$6.3 million per annum resulting from the proposed works. This is due to the increase in infrastructure elements at RAAF Base Learmonth that require maintenance.

Project Delivery System

37. A Project Manager / Contract Administrator and a Design Services Consultant have been engaged for the development phase of the Project. These services will be extended into the delivery phase, subject to a value for money assessment of fee proposals.

38. An Early Contract Involvement Head Contractor has been engaged for the development phase to provide input to the design, construction schedule and cost. The contractor will be extended to deliver the works under a Head Contract, subject to a value for money assessment of their cost proposal. The Head Contract form of delivery provides the Commonwealth with direct control over the design and quality of the Project. This delivery methodology will also help promote opportunities for small to medium enterprises in construction.

Construction Program

39. Subject to Parliamentary approval, construction is expected to commence in mid-2024 and be completed by the end of 2028.

Public Value

40. Defence has comprehensively assessed public value, opportunities and benefit to the community as a result of the proposed works:

- a. **Economic impacts.** The Project expenditure will support the broader Australian economy and in particular the construction and services sectors within the Shire of Exmouth and surrounding regions.
- b. **Employment opportunities.** The Project will employ a diverse range of consultants, contractors and construction workers, and is expected to generate opportunities for up-skilling and job training to improve individual skills and employability on future projects.
- c. **Local industry and Indigenous business involvement opportunities.** The Head Contractor will actively promote opportunities for small and medium sized local enterprises through construction trade packages. The Head Contractor will develop a Local Industry Capability Plan and an Indigenous Participation Plan to detail how it will engage with and maximise opportunities for local industry and Indigenous businesses on the Project, while providing value for money to the Commonwealth.

Below the Line Items

41. In the event that savings are achieved through tendering or retiring risk provision, Defence proposes to use the savings to deliver:

- a. additional parking apron space to support the loading and unloading of cargo and explosive ordnance; and
- b. retention of the temporary construction workers' accommodation facilities to meet the longer term surge accommodation needs of the Base.

Revenue

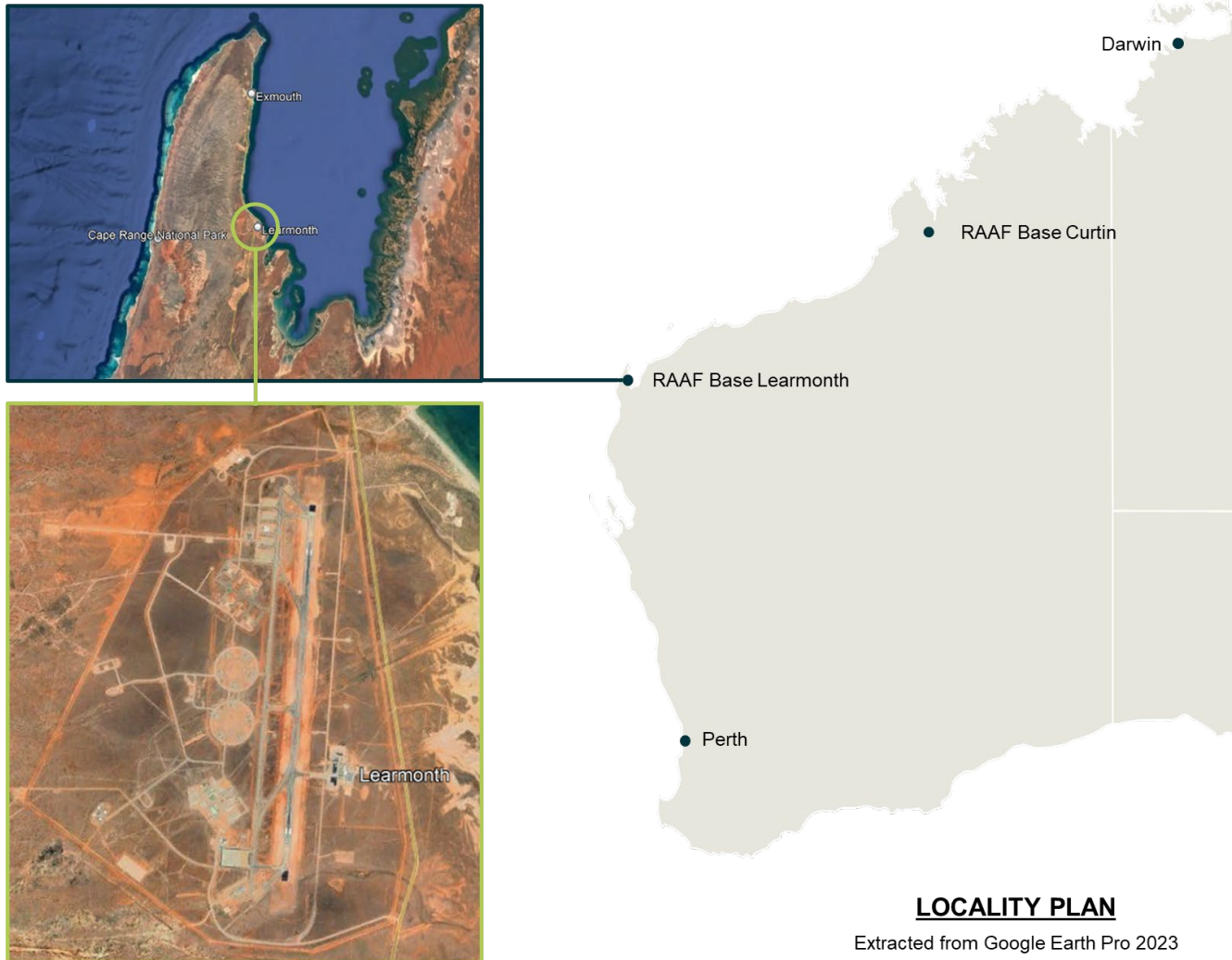
42. No revenue is expected to be derived from the Project.

Attachments

1. Locality Plan
2. Overview of Project Scope

Attachment 1

Locality Plan



Overview of Project Scope

